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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/762,993	01/22/2004	David Louis Burrus	13DV-13395-05	6001
7590	08/12/2004		EXAMINER	
Steven J. Rosen Patent Attorney 4729 Cornell Rd. Cincinnati, OH 45241			CASAREGOLA, LOUIS J	
			ART UNIT	PAPER NUMBER
			3746	

DATE MAILED: 08/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/762,993	BURRUS ET AL.
Examiner	Art Unit	
Louis J. Casaregola	3746	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on \_\_\_\_.
- 2a) This action is **FINAL**.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 17-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_ is/are allowed.
- 6) Claim(s) 17-25 is/are rejected.
- 7) Claim(s) \_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: \_\_\_\_.

***Objections To Claims***

Claims 18-25 are objected to under 37 CFR 1.75(a) for the following reasons:

In claim 18 and related dependent claims 19-25, “said film cooling holes” (claim 18, lines 3, 5, and 7) lack antecedent basis.

In claims 18 and 24, “said aft walls” (line 3) and “said forward walls” (line 5) also lack antecedent basis. Note that in this instance, the antecedent supports only a single forward wall and a single aft wall rather than the plural walls recited in the claims.

In claims 20 and 23, “said and outer wall” (last line) contains a transcription error; it appears that the terms “said” and “and” have been inadvertently reversed.

***Claim Rejections - 35 USC § 112***

Claims 17-25 are rejected under 35 U.S.C. § 112, first and second paragraphs, as the claimed invention is not described in such full, clear, concise and exact terms as to enable any person skilled in the art to make and use the same, and/or for failing to particularly point out and distinctly claim the subject matter which applicants regard as the invention.

This case encompasses multiple species of a gas turbine combustor can assembly, but the claims are all drawn to the embodiment with the reverse flow path shown in Figures 7-9; see lines 28-32 in independent claim 17. As disclosed, this embodiment includes air injection first holes 112 in aft wall 44 and air injection second holes 114 in forward wall 46; see Figures 7 and 9 along with paragraph 0039 (spec. pages 15-16). The claims however recite the air injection holes as being reversed from those in the disclosure; i.e. the air injection first holes are in the forward wall and the air injection second holes are in the aft wall; see claim 17, lines 23-24. Note also that dependent claim 18 recites hole locations (lines 9-12) that contradict corresponding limitations in parent claim 17, but dependent claim 24 recites hole locations (lines 9-12) that agree with the limitations in claim 17 and contradict the limitations in claim 18. It thus appears that either the claim limitations directed to hole location are inaccurate and inconsistent, or the disclosure in this case includes significant errors with respect to this subject matter.

Dependent claim 22 further recites a “second stage pre-mixing convoluted mixer” (lines 2-3) along with “lobes extending radially” (line 5). It is not clear how this structure corresponds to the disclosed invention since neither the second stage mixer nor the lobes can be found in the apparatus shown in Figures 7-9. (Such elements do appear in the embodiment of Figure 5, but this is not a reverse flow combustor as specified in the present claims, hence, the claims cannot rely on Figure 5 for support.)

L. J. Casaregola  
703-308-1027 (M-F; 7:30-4:00)  
703-872-9306 FAX  
August 4, 2004

*LJ Casaregola*  
LOUIS J. CASAREGOLA  
PRIMARY EXAMINER

If repeated attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Justine Yu, can be reached at 703-308-2675.

Information regarding the status of this application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR, and status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).